

tendency may reflect concerns for personal safety (table glass, Concentration No. 4, Figure 46; household glass, Concentration No. 3, Figure 47) or refuse associated with activity areas (bottle and jar glass, Concentration No. 2, Figure 45).

The area around and north of S50W140 was the only disposal area used during the twentieth century. This interpretation is substantiated by informant interviews and the artifact distribution frequencies for twentieth century ceramics. A high peak occurs in this area on all of the maps produced for artifacts other than ceramic (bottle and jar, window, table, and household glass, nails, and brick). This area appears to be the only area of constant reuse during the nineteenth and twentieth centuries. Research has shown that the traditional yard was replaced with a well groomed and manicured lawn during the twentieth century which was ornamental and only used recreationally (Moir 1987:230; Glassie 1968, 1972). The ceramic concentrations form a "band" effect along the S60 line separating "the lesser used and/or highly swept and maintained Inner Yard and the less well maintained or more greatly used Outer Yard" (Moir 1987:233). This band also created a horseshoe ringing the house; similar banding also occurred in east Texas (Moir 1987:233).

INTERSITE ANALYSES AND INTERPRETATIONS

The archaeological data recovered from the A. Temple Site will enable comparisons with other sites located within the surrounding region. This intersite analysis will include questions concerning site structure (comparing house dimensions

and farm layout), dietary patterns, and consumption habits (using vessel function comparisons between sites) at the site. The results of these interpretations will then be utilized in answering questions concerning processes and patterns of social and cultural change.

Tenant sites noted in the data recovery research design which were to be included in the intersite analysis of the Temple Site were the Robert Ferguson/Weber Site (Coleman et al. 1983), the Grant Tenancy Site (Taylor et al. 1987), and Block 1191 (Beidleman et al. 1986). Several non-tenant sites consisted of the Wilson-Slack Agricultural Works Complex (Coleman et al. 1985), the Hawthorn Site (Coleman et al. 1984), and the Mudstone Branch Site (Heite 1984). All of these sites were Phase III data recovery excavations with the exception of the Mudstone Branch Site which was only a Phase I/II excavation. Because of the diverse analyses completed on these sites, the researchers are unable to include each site mentioned above in the various topics to be addressed in the intersite analysis. Thus, whenever possible, the sites will be included in the following discussions and comparisons with other sites that contain comparable data will also be incorporated.

SITE STRUCTURE

Having the architectural remains of the A. Temple house intact provided an opportunity to examine this site with other tenant and non-tenant dwellings in the area. Recent research involving house dimensions in the region has shown that inferences on house sizes can be correlated with social ranking

(Herman 1987a). Herman's research has revealed that tenant houses in the Lower Delaware Valley during the nineteenth century were generally smaller, not as valuable, and less substantially constructed than owner-occupied structures. The best generalization about the two types of dwellings and sites noted above is that the tenant occupations seem to range in size from 380 to 490 square feet, and that tenant sites lacked the amount and variation of outbuildings associated with owner-occupied sites (Herman 1987a:64, 1987b; Stiverson 1977).

The A. Temple house (Structure I) was compared to several other excavated house sites in New Castle County, Delaware occupied during the second half of the nineteenth century (Table 17). Only the first floor dimensions were used in this analysis, although it is known from documentary and/or archaeological research that all of these dwellings were constructed with at least a garret or a second floor. Additionally, all of the dwellings used in this sample were in existence for at least 60 years, and most were occupied for over 100 years. All of the structures compared were contemporaneous, and the sample included owner-occupied, tenant, and black-occupied houses. The eight houses compared with the A. Temple Site dwelling included five owner-occupied sites: the Patterson Lane House (Catts et al. 1990), the William M. Hawthorn House (Coleman et al. 1984), the Wilson-Slack House (Coleman et al. 1985), the Williams-Stump House (Catts and Custer 1990) and the William Dickson II House (Catts et al. 1990). The tenant site houses used in this analysis included: the Robert Ferguson House (Coleman et al.

TABLE 17

**FIRST FLOOR DIMENSION COMPARISONS
FROM ARCHAEOLOGICAL SITES IN NEW CASTLE COUNTY**

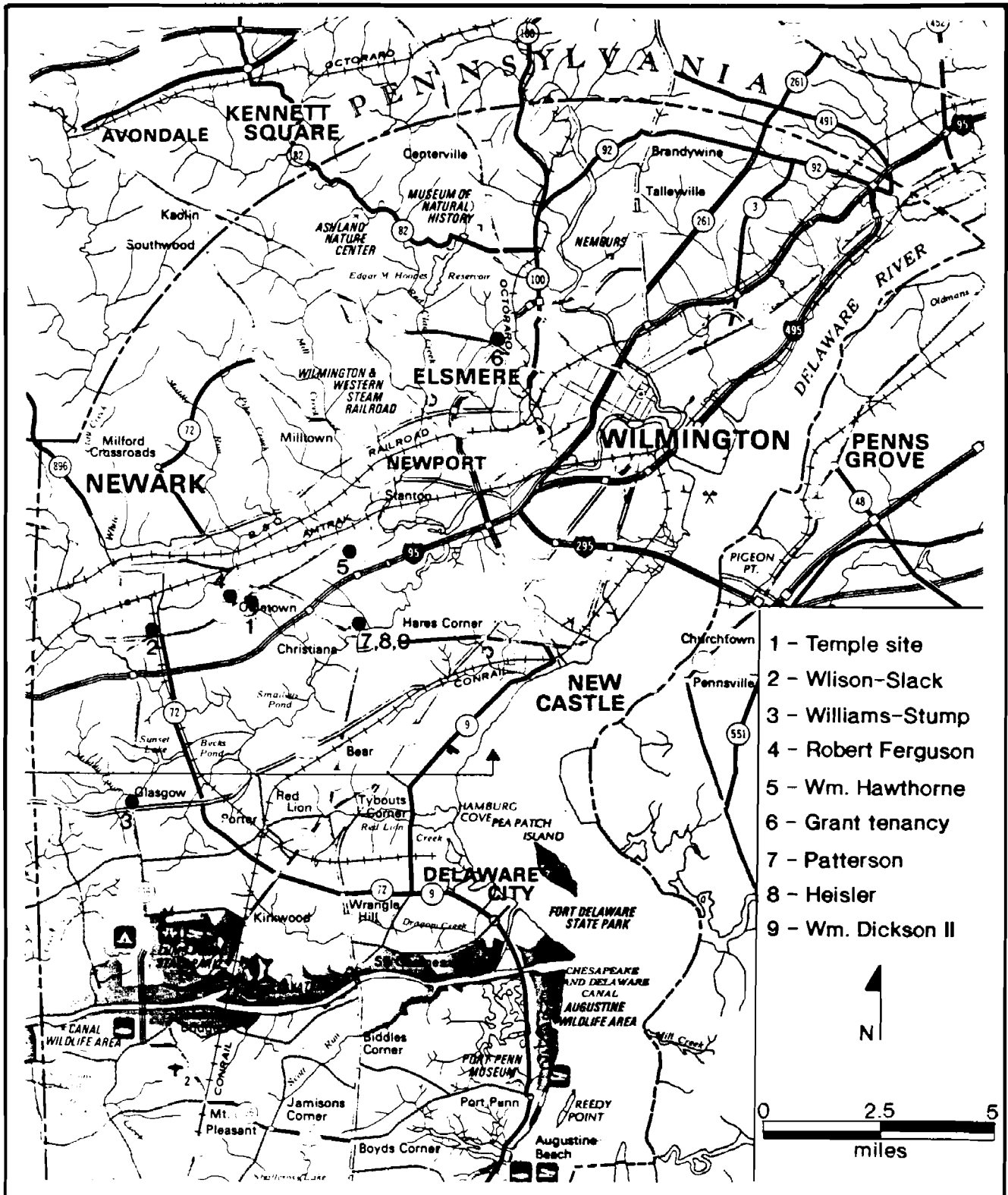
Site	Dimension (feet)	Area
Patterson Lane House (7NC-E-53) circa 1740-1930 owner/tenant occupied	46 x 29	1334 sq ft
Hawthorn (7NC-E-46) 1738-1960 owner occupied	original log 29 x 21 frame add. 12 x 21 frame kitch. 12 x 17	609 252 204 ----- 1065 sq ft
Wilson-Slack (N-6-269) 1850-1983 owner occupied	32 x 30	960 sq ft
Temple House (7NC-D-68) circa 1830-1955 tenant occupied	orig. frame 26 x 20 frame add. 16 x 20	520 320 ----- 840 sq ft
Ferguson House (N-3902) 1837-1955 tenant occupied	16 x 24 add. 18 x 15	384 270 ----- 654 sq ft
Williams House (Stump) (7NC-D-130) 1845-1930 owner occupied	27 x 17	459 sq ft
Dickson II (7NC-E-82) 1845-1919 tenant occupied	18 x 22	392 sq ft
Grant Tenancy (7NC-B-6) circa 1830-1941 tenant occupied	16 x 15.5 east add. 6 x 16.5	248 93 ----- 341 sq ft
Heisler Tenancy (7NC-E-82) owner occupied	12 x 21	248 93 ----- 341 sq ft

KEY:

add. = addition
kitch. = kitchen
orig. = original

FIGURE 51

Location of Sites Used in Architectural Comparisons



1983), the Heisler Tenancy House (Catts et al. 1990), and the Grant Tenancy House (Taylor et al. 1987) (Figure 51). Five of these dwellings (the Hawthorn Site, the Temple Site, the Ferguson Site, the Patterson Lane Site and the Grant Tenancy Site) contain the structural remains of additions.

The Patterson Lane Site was the dwelling of John Read, a prominent merchant and father of George Read, one of Delaware's signers of the Declaration of Independence. It functioned as a domestic site, and was the location of an important and active wharf, store, and landing in the early-to-mid-eighteenth century. Later, in the nineteenth century, the site operated as a tenant farm (Catts et al. 1990).

The Hawthorne Site was an owner-occupied farm in the nineteenth century consisting of 111 acres. The occupants of the Hawthorn Site were found to rank in the upper four to 12 percent of the taxable local population through time (Coleman et al. 1984).

The Wilson-Slack Site was owned by middle class rural industrial entrepreneurs during the nineteenth century. Its occupants were involved in both the blacksmithing and wheelwrighting businesses (Coleman et al. 1985).

The Williams Site archaeological investigations revealed a black laborer occupation, as inferred from the remains of the Williams-Stump house, well, outbuildings, fencelines and privy features. The archaeological information, along with the archival research of Sidney Stump's residence at the site, revealed the relatively low socio-economic status of the site

occupants (Catts and Custer 1990).

The Dickson II house, a tenant dwelling, was inhabited by a black family clearly of the lowest social station within the black community, relying on rag picking for income and wild game for much of the family's diet (Catts et al. 1990).

The Grant Tenancy Site was an early nineteenth century tenant site. Based on ceramic comparison and faunal analysis, the site appears to have been occupied by individuals of a higher economic status (Taylor et al. 1987).

The Heisler Tenancy Site was owned in the mid-nineteenth century by William Egbert Heisler, a prominent landholder. Based on building dimensions, evidence of land use at the site, and examination of the artifact assemblage for both vessel types and status, this domestic site appears to have been occupied by middle class tenants (Catts and Custer 1990).

The Ferguson Site was tenant occupied during the nineteenth century. The economic status of the inhabitants at this site was unattainable due to lack of sufficient evidence to draw any clear conclusions (Coleman et al. 1983).

Table 17 illustrates these house dimensions with the Temple House and several observations can be made. The A. Temple Site ranked fourth in size of all the houses compared. The three houses that ranked above the Temple House included the Patterson Lane House, the Hawthorn House and the Wilson-Slack House. The latter two houses were owner-occupied, while the Patterson Lane House was both owner- and tenant-occupied during this period. However, the Patterson Lane House had originally been constructed to be an owner-occupied dwelling, the primary reason for its

tremendous size. All of the other houses fall into the range given by Herman (1987a:64) for small owner-occupied structures or tenant dwellings with the exception of the Ferguson House. This house is smaller than Temple's house but larger than the other buildings. Three of the four dwellings (Williams, Dickson II, and Heisler) ranked in the bottom half of the scale according to size and are black owner-occupied/tenant-occupied dwellings. The Grant Tenancy House, a white tenant-occupied site, had only 341 square feet of space on the first floor placing it below Herman's (1987a) range. It should be remembered that the architectural data listed in this table only provides a ranking based on first floor dimensions; the addition of second floor dimensions would only serve to increase the total available living space and further differentiate the dwellings.

Several conclusions can be made from these observations. A vast size difference is present between the white owner-occupied houses and black owner- and tenant-occupied houses. This contrast has also been noted in previous studies (Catts and Custer 1990; Catts et al. 1990; Herman 1987a). Secondly, there should be similarities in size among the Temple house, the Grant Tenancy and the Ferguson dwellings since all are tenant-occupied. This, however, is not the case; there are substantial differences in size among the three structures. Therefore, factors other than mere occupation by a tenant must have been considered by the builders. Archival research suggests that while the Temple Farm was an absentee-landowner site, the wealthy landowner of the property could have constructed this dwelling for the express

purpose of occupation by a farm manager. This could account for the size differences among the three sites. Research by Herman (1987a) has noted that there are two categories of tenant house, farm manager and resident laborer, the former structures being larger and substantial, and the latter being smaller and ephemeral. Finally, the Grant Tenancy house appears to be an architectural anomaly (Table 17). Taylor et al. (1987) did not provide any interpretation of this structure beyond a description of the architectural features, making further inferences difficult.

Another aspect of site structure includes farm layout. Research conducted in east Texas (Moir 1987) and the middle Atlantic region (Herman 1987a; Manning 1984) has shown that farm complexes tend to be made up of two sets of auxiliary buildings. One set includes privies, woodsheds, smokehouses, and milkhouses being located close to the dwellings while crib barns, cattle barns, granaries, stables and threshing barns which comprise the second set, were located a distance away (Herman 1987a). Moir (1987) noted that at extant farmsteads the larger support structures were located from 100m to 200m (300-600 feet) from the house.

The Wilson-Slack Site (Coleman et al. 1985), the Hawthorn Site (Coleman et al. 1984), and the Mudstone Branch Site (Heite 1984) are examples of owner-occupied farms. The Wilson-Slack Site was an agricultural works complex consisting of numerous outbuildings (a blacksmith shop, granary, chicken house, barn, machine shop/grist mill, and an unknown pier-supported structure) located on a two acre property (Coleman et al. 1985). The

Hawthorn Site, located on a 111 acre tract, consisted of a barn, milkhouse, granary and shed, corn crib, six chicken houses, a toolshed, and a woodbox near the house (Coleman et al. 1984). The Mudstone Branch Site consisted of two barns and a drying shed located on an approximately 169 acre parcel (Heite 1984). Two tenant-occupied sites, the Ferguson Site (Coleman et al. 1983), and the Grant Tenancy Site (Taylor et al. 1987) have noted fewer outbuildings associated with the farm complex, an observation also made by Herman (1987a) based on documentary sources. The Ferguson Site consisted of a house and two outbuildings, while the main farm located across the road contained the main dwelling, stables, sheds, and barns. The Grant Tenancy Site consisted of one house and one or possibly two outbuildings.

Since the A. Temple Site is an absentee-owner site, it would be necessary for the farm to contain, on the property, all relevant outbuildings required to successfully operate the farm. In this respect, it would be expected that the Temple Site would reflect an owner-occupied site (Hawthorn Site) rather than a tenant-occupied site that has the owner located nearby (Ferguson Site). The data recovery excavations at the Temple Site recovered the remains of a house and six, possibly seven, outbuildings, two privy pits, and a well. The size of the outbuildings was smaller than those found at owner-occupied sites (Coleman et al. 1985; Coleman et al. 1984), and it is possible that the larger auxiliary buildings were located outside the ROW (Moir 1987; Manning 1984). Thus the A. Temple Site consisted of a house, smaller than an owner-occupied but larger

than other tenant-occupied houses, and outbuildings, similar in number to those found on owner-occupied farms but not as diverse and substantial. It was expected that the Grant Tenancy Site would be similar to the Temple Site since both were absentee-owner sites, and Taylor et al. (1987) note the possibility of subsidiary structures being located outside the ROW.

DIETARY AND CONSUMPTION HABITS

The faunal collections recovered from the Phase III excavations provide little information of the changing subsistence or consumption habits through time. Generally the faunal remains were recovered from disturbed contexts (plowzone) and no features containing significant remains were encountered.

A different level of comparison which has been shown to reflect consumption habits involves comparison of vessel functions. This type of analysis consists of dividing the minimum vessels identified into various categories which can then be compared and contrasted with other deposits to distinguish general trends and characteristics regarding vessel use and function (Otto 1984; Kelso 1984). The categories compared were flatwares to hollowwares, serving vessels to storage/preparation vessels, and cups to ceramic mugs and jugs. The minimum vessels that were recovered from Outbuilding I (Features 1 and 23), Outbuilding II (Features 31 and 61), and Outbuilding IV (Feature 56) from the Temple Site were used in this comparison. The vessels were compared in these categories to determine if there were any significant differences between the proportions of these categories and analyzed vessel form frequencies in order to

identify diachronic and spatial differences in lifestyles between social and economic classes (Kelso 1984). At most residential sites, the flatware/hollowware ratio is indicative of food consumption and dietary patterns, with an abundance of flatwares suggestive of roast prime meat cuts, and more hollowwares indicative of the consumption of stews or potted meals by the site's inhabitants. The comparison of serving vessels with storage and preparation vessels basically allows the examination of the proportion of hollowware vessels in an assemblage that are not related to serving; i.e., redware and stoneware crocks and bowls. Finally, the comparison of cups with ceramic mugs and jugs is suggestive of the status of the occupants. Research by Miller (1980) and Spencer-Wood and Heberling (1987) with the Miller Index values for ceramic cups has concluded that this category (cups) is most reflective of the social status of a site's occupants. Recent archaeological investigations at the John Ruth Inn Site (Coleman et al. 1990) and the Patterson Lane Site Complex (Catts et al. 1990) support this contention.

When comparing the vessel assemblages among these different archaeological sites, it is important to systematically compare the frequencies of the vessel types among all of the sites in order to correctly assess their similarities and differences. Such systematic comparisons have recently been conducted on three sets of sites in New Castle County: the John Ruth Inn Site (Coleman et al. 1990), the Patterson Lane Site Complex (Catts et al. 1990), and the Williams Site (Catts and Custer 1990). Other systematic comparisons in the local area have not utilized this method, and consequently have tended to underestimate the

variability of the vessel assemblage (Taylor et al. 1987). In order to avoid this shortcoming, a difference-of-proportion test (Parsons 1974:445-449) was applied to paired combinations of the sites for each of the vessel categories. The categories compared included flatwares/hollowwares, serving/storage and preparation, and cups/mugs and jugs. The difference-of-proportion test is applicable in this case because it does not require normally distributed data. Rather, the difference-of-proportion test requires only that the sampling distribution of estimated sample proportions is normally distributed (Parsons 1974:433-436).

The A. Temple Site ceramic assemblage, consisting of 57 reconstructed vessels, was compared to three local sites in New Castle County which had similar dates of occupation and ceramic data comparable with the Temple Site material (Table 18). These sites included the Dickson II Site and the Heisler Tenancy Site, both black tenant sites excavated at Christiana (Catts et al. 1990), and the Stump black-owner occupation of the Williams Site (Catts et al. 1990). Ceramic data from other white tenant and owner-occupied sites in the region were not in a comparable form to be included in this analysis. With this limitation, the objective of this comparison was to note if any differences or similarities were present between small black owner-occupied and tenant-occupied sites and the A. Temple Site, which is defined as a white-occupied 200 acre tenant farm. Recent research at Afro-American archaeological sites (Deetz 1977; Otto 1984; Baker 1980) has noted that a distinctive pattern of ceramic use is discernible at black sites, consisting of the presence of serving

TABLE 18

PERCENTAGE VALUES AND VESSEL FREQUENCIES

	Temple	Williams	Dickson II	Heisler
Flatware	13(31%)	91(37%)	14(29%)	108(38%)
Hollowware	29(69%)	153(63%)	34(71%)	173(62%)
Prep/Stor.	12(21%)	88(36%)	13(29%)	28(18%)
Serving	44(79%)	156(64%)	32(71%)	132(83%)
Cups	3(100%)	13(87%)	10(100%)	60(97%)
Mugs/Jugs	0(0%)	2(13%)	0(0%)	2(3%)

Note: Percentages reflect the frequency of flatware to hollowware, preparation/storage to serving, and cups to mugs/jugs at each site.

Values represent total vessels recovered from the given site.

KEY:

Prep/Stor. = Preparation/Storage

bowls in over 40 percent of the ceramic assemblage. Recently, this patterning has been questioned and refuted by the work of Geismar (1982:155) and Catts and Custer (1990), and doubt has been raised that a "universal Afro-American pattern" even exists (Leone and Crosby 1987:408).

Table 18 shows the percentage of values and vessel frequencies used in the comparison, and Table 19 shows all of the test statistics for each of the paired site comparisons for each paired vessel category. Test statistic values greater than 1.96 indicate that a significant difference-of-proportion exists for those categories. Out of eighteen possible paired comparisons,

there is a total of only two significant differences shown in Table 19.

TABLE 19

TEST STATISTICS FOR PAIRED SITE COMPARISONS

	T W	DII	H	W DII	H	DII H
Flatware	.79	.18	.93	1.07	.27	1.23
Hollowware	.79	.18	.93	1.07	.27	1.23
Prep/Stor.	*2.10	.86	.65	.93	*4.03	1.69
Serving	*2.10	.86	.65	.93	*4.03	1.69
Cups	.67	.017	.32	1.20	1.58	.58
Mugs/Jugs	.67	.017	.32	1.20	1.58	.58

KEY:

T - Temple Site
W - Williams Site
DII - Dickson II Site
H - Heisler Site
* - Significant difference-of-proportion

Table 20 lists the Temple, Williams, Dickson II, and Heisler Tenancy sites by vessel categories of similar values and notes which of the sites can be grouped together or separated due to significant differences. Remarkably, all of the sites used in this comparison are similar in their proportion of flatwares to hollowwares, indicating that there is a strong relationship between the ratios of these vessel types. Similar analyses conducted with the Patterson Lane ceramic assemblage have noted comparable results, inferring that flatwares to hollowwares do not seem to be indicative of social standing, but may indeed be indicative of dietary patterns (Catts et al. 1990).

TABLE 20

RANKING OF SITES BY CATEGORIES

Flatware	Hollowware	Serving	Prep/Stor.	Cups	Mugs/Jugs
H(38%)	DII(71%)	H(83%)	W(36%)	DII(100%)	W(13%)
W(37%)	T(69%)	T(79%)	DII(29%)	T(100%)	H(3%)
T(31%)	W(63%)	DII(71%)	T(21%)	H(97%)	DII(0%)
DII(29%)	H(62%)	W(64%)	H(18%)	W(87%)	T(0%)

Note: Percentages are taken from Table 19

KEY:

T - Temple Site
 W - Williams Site
 DII - Dickson Site
 H - Heisler Site
 Prep/
 Stor. - Preparation/Storage

The reason there are no differences between the cups vs. mugs and jugs category could be due to the large number of glass bottles present at the sites. Of the 400 glass fragments recovered from the Temple Site features used in this comparison, bottle and jar glass represents over 70 percent of the assemblage. These glass containers were not factored into the analysis of the cups vs. mugs and jugs. By the second half of the nineteenth century, the use of bottles as storage containers had begun to replace ceramic bottles and jugs. Recent work in Wilmington, Delaware has shown that after 1870 bottle glass occurs more frequently than ceramics on urban sites (Leedecker et al. 1987:250-252). Future excavations of late-nineteenth century domestic sites may wish to address this observation, and factor

it into their analyses.

The only paired comparisons that showed any differences were with the serving vessel vs. storage/preparation vessel comparisons. The Temple assemblage was grouped between the Heisler Tenancy and Dickson II assemblages for the serving vessels. The Dickson II and Heisler Tenancy sites were occupied by the same black family during the second half of the nineteenth century; therefore, the inclusion of the Dickson II assemblage with these two sites in this category may be the result of consistent consumption habits and disposal practices by the family. The A. Temple and Heisler sites contained lesser proportions of preparation/storage vessels than the Williams-Stump and Dickson II assemblages (Table 20).

Significantly, the Temple Site assemblage paired with the Heisler Tenancy assemblage in both categories, indicating unexpected similarities between the ceramic assemblage of a black owner-occupied site with a white farm tenant site. The A. Temple Site was occupied by a lower-to-middle class white tenant or farm manager, while the Heisler Site has been interpreted as the home of a late nineteenth-century upper lower-class black owner (Catts et al. 1990; Catts 1988). It has been hypothesized by Catts and Custer (1990) that the low frequency of serving vessels present at the Heisler Site when compared to the other black-occupied sites may reflect internal social ranking between the black sites. The similarity of the Temple ceramic assemblage with the black-occupied sites suggests that the occupants of the Temple and Heisler sites were of similar social statuses. Thus, the comparison of the categories of serving with

storage/preparation vessels may be reflective of the true social position of a site's inhabitants in the second half of the nineteenth-century, as revealed by the historic documentation and the architectural remains (Catts et al. 1990).

CONCLUSIONS AND FUTURE RESEARCH DIRECTIONS

The archival and archaeological research at the A. Temple Site (7NC-D-68) provide interesting insights into tenant life in northern New Castle County. More importantly, the A. Temple Site provides significant data about agriculture in a critical period of economic, social, and physical landscape change as identified in the statewide historic preservation plan (Ames, Herman and Siders 1987:93-98). The occupation of the A. Temple Site from ca. 1814 to 1850 corresponds to a period of rapid change as Delaware, and particularly New Castle County, moved from an essentially colonial economy to an increasingly dynamic national economy in the first half of the nineteenth century. Ames, Herman and Siders have identified the 1830s as an important watershed between the nascent national economy of the first two decades of the nineteenth century and the period of rapid industrialization and capitalization of New Castle County evident by the second quarter of the nineteenth century (Ames, Herman and Siders 1987:89-91).

The A. Temple Site was occupied through this period of change and offers significant data on the process of economic and agricultural changes affecting New Castle County. Improvements in transportation evident in the changing role of associated Oglethorpe and Chestnut Hill Road as identified by Coleman et al.